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performing said operation specified in the database query on said data.

1 7. (Amended) A method for processing database query operations, comprising
2 the computer-implemented steps of:
3 a database server receiving a database query that:
4 references data in a relational structure as if the data was stored in a multi-dimensional
5 array, and
6 specifies an operation for manipulating data; and
7 in response to receiving said database query the database server executing the query by
8 performing steps that include:

- retrieving the data from said relational structure;
- performing said operation previously specified in said database query.
- 1 8. (Amended) The method of Claim 7, wherein:
- 2 the step of receiving a database query comprises the step of receiving a database query
- 3 that specifies α multi-dimensional array operation.
 - 12. (Amended) A method for processing database query operations, comprising
- 2 the computer-implemented steps of:
- a database server receiving a database query that specifies an operation for manipulating
- data; and
- 5 in response to receiving the database query, the database server performing the steps of:
- 6 retrieving a first set of data from a first relational structure;



storing the first set of data in a non-felational structure; and
manipulating the first set of data by performing the operation previously specified in the
database query.

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- 18. (Amended) The method of Claim 12, wherein the step of manipulating the
- first set of data comprises the steps of symbolically addressing the first set
- of data as an n-dimensional array information.

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- 1 41. (New) A computer-readable medium carrying one or more sequences of
- 2 instructions which, when executed by one or more processors, causes the
- one or more processors to perform the method recited in Claim 1.
- 1 42. (New) A computer-readable medium carrying one or more sequences of
- 2 instructions which, when executed by one or more processors, causes the
- one or more processors to perform the method recited in Claim 2.
- 1 43. (New) A computer-readable medium carrying one or more sequences of
- 2 instructions which, when executed by one or more processors, causes the
- one or more processors to perform the method recited in Claim 3.
- 1 44. (New) A computer-readable medium carrying one or more sequences of
- 2 instructions which, when executed by one or more processors, causes the
- one or more processors to perform the method recited in Claim 4.

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1 45. (New) A computer-readable medium carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 5.

- 1 46. (New) A computer-readable medium carrying one or more sequences of 2 instructions which, when executed by one or more processors, causes the 3 one or more processors to perform the method recited in Claim 6.
- 1 47. (New) A computer-readable medium carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 7.
- 1 48. (New) A computer-readable medium carrying one or more sequences of
 2 instructions which, when executed by one or more processors, causes the
 3 one or more processors/to perform the method recited in Claim 8.
- 1 49. (New) A computer-readable medium carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 9.
- 1 50. (New) A computer-readable medium carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 10.

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- 51. (New) A computer-readable medium carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 11.
- 1 52. (New) A computer-readable medium carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 12.
- 1 53. (New) A computer-readable medium carrying one or more sequences of 2 instructions which, when executed by one or more processors, causes the 3 one or more processors to perform the method recited in Claim 13.
- 1 54. (New) A computer-readable medium carrying one or more sequences of
 2 instructions which, when executed by one or more processors, causes the
 3 one or more processors to perform the method recited in Claim 14.
- 1 55. (New) A computer-readable medium carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 15.
- 1 56. (New) A computer-readable medium carrying one or more sequences of
 2 instructions which, when executed by one or more processors, causes the
 3 one or more processors to perform the method recited in Claim 16.

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(New) A computer-readable medium carrying one or more sequences of 57. instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 17. 58. 1 (New) A computer-readable medium/carrying one or more sequences of 2 instructions which, when executed by one or more processors, causes the 3 one or more processors to perform the method recited in Claim 18. 1 59. (New) A computer-readable medium carrying one or more sequences of 2 instructions which, when executed by one or more processors, causes the 3 one or more processors to perform the method recited in Claim 19. 60. 1 (New) A computer-feadable medium carrying one or more sequences of

instructions which, when executed by one or more processors, causes the

one or more processors to perform the method recited in Claim 20

Respectfully submitted,

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